

## **QI Study Outline**

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**Date:** 4/15/08

**Laboratory:** Division of Analytical Chemistry, Forensic Drug Laboratory

### **A. Quality topic**

The Forensic Drug Laboratory will perform a repeatability (precision) study to determine the tolerance of each balance and write an SOP for the monthly balance QC.

### **B. Review or monitoring activities**

The Drug Laboratory will purchase certified UltraClass Troemner weights for the above project. The performance of each balance will be assessed using five weights evenly distributed throughout the balance's weighing range. Each of the five weights will be read four times a day for five days. Twenty points will be used to determine the standard deviation for each weight. Findings will then be compared to the manufacturer's stated tolerance.

The certified Troemner weights will be stored in the GC/MS laboratory when not in use. They will be used to check the laboratory's secondary weights, used by chemists for their daily and monthly QC checks. If the secondary weights do not meet the manufacturer's stated tolerance they will be removed from circulation. Primary weights will be sent out yearly for recertification and secondary weights will be reevaluated yearly against the primary weights.

### **C. Findings and assessments summary**

### **D. Recommendations or corrective action(s)**

### **E. Implementation of changes**

### **F. Follow-up and outcomes**

Laboratory Division Director	/	Date
Quality Assurance Program Director	/	Date

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Laboratory Director

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Date